

## AMENDMENTS TO THE CLAIMS

1-2. (cancelled)

3. (currently amended) [[A]] In an on-line network environment, a method of operation of a network management system (NMS), the method comprising:

~~a network management system (NMS) receiving a trap message from an agent, wherein the NMS has access to an NMS the agent having~~ management information base (MIB) information associated therewith, and wherein the agent has access to an agent MIB; and

in response to receiving the trap message, the NMS transmitting to the agent a request to perform conducting a walk operation, on the agent MIB wherein the walk operation facilitates automatic update of the MIB information associated with the agent; and

~~based on a result of the walk operation, the NMS updating the NMS MIB.~~

4. (currently amended) The method of claim 3, wherein the ~~NMS stores the NMS MIB and the agent stores the agent~~ MIB information.

5. (previously presented) The method of claim 3, wherein the trap message is a simple network management protocol (SNMP) trap message and the walk operation is an SNMP walk operation.

6. (currently amended) The method of claim 3, ~~wherein the NMS further comprising updating the NMS MIB comprises the NMS updating the NMS MIB~~ information to be synchronized with ~~the agent~~ a second MIB.

7. (currently amended) The method of claim 3, further comprising:

~~the NMS transmitting at least part of the updated NMS-MIB information to the agent.~~

8. (currently amended) [[A]] In an on-line network environment, a method of operation of an agent, the method comprising:

~~an agent checking an object identifier (OID), wherein the agent has access to an agent management information base (MIB);~~

~~the agent determining that a change has occurred to management information base (MIB) information associated with the agent ~~the OID has changed~~;~~

~~in response to determining that the change has occurred to the MIB information associated with the agent, in response to determining that the OID has changed, the agent transmitting a trap message to a network management system (NMS), wherein the NMS has access to an NMS MIB; and~~

~~the agent receiving a request to perform a walk operation from the NMS, wherein the walk operation facilitates automatic update of the MIB information associated with the agent. request from the NMS; and~~

~~in response to receiving the walk operation request, the agent transmitting a walk operation reply to the NMS.~~

9. (currently amended) The method of claim 8, wherein the ~~NMS stores the NMS MIB and the agent stores the agent~~ MIB information.

10. (previously presented) The method of claim 8, wherein the trap message is a simple network management protocol (SNMP) trap message and the walk operation is an SNMP walk operation.

11. (previously presented) The method of claim 8, further comprising:  
the agent receiving at least part of an updated NMS MIB from the NMS.

12. (previously presented) The method of claim 11, wherein the updated NMS MIB was updated from the NMS MIB.

13. (currently amended) The method of claim 8, wherein determining that the change has occurred determining a change to an object identifier (OID) has occurred. ~~the OID is named MIB\_Info\_Last\_Change\_Time.~~

14. (previously presented) A system comprising:  
a network management system (NMS); and  
an NMS management information base (MIB), wherein the NMS is configured to receive a trap message from an agent that has access to an agent MIB, in response to receiving the trap message, conduct a walk operation on the agent MIB, and based on a result of the walk operation, update the NMS MIB.

15. (previously presented) The system of claim 14, wherein the NMS stores the NMS MIB and the agent stores the agent MIB.

16. (previously presented) The system of claim 14, wherein the trap message is a simple network management protocol (SNMP) trap message and the walk operation is an SNMP walk operation.

17. (previously presented) The system of claim 14, wherein the NMS updating the NMS MIB comprises the NMS updating the NMS MIB to be synchronized with the agent MIB.

18. (previously presented) The system of claim 14, wherein the NMS is further configured to transmit at least part of the updated NMS MIB to the agent.

19. (new) The method of claim 3, wherein the MIB information comprises a meta MIB comprising an object table and a trap table, wherein the meta MIB is configured to store an object identifier (OID), and wherein performing the walk operation comprises performing the walk operation on the meta MIB.

20. (new) The method of claim 8, further comprising:  
the agent conducting a walk operation on the MIB information; and  
based on results of the walk operation, the agent regenerating the MIB information.

21. (new) The method of claim 20, wherein the MIB information comprises a meta MIB comprising an object table and a trap table, wherein the meta MIB is configured to store an

object identifier (OID); and wherein performing the walk operation comprises performing the walk operation on the meta MIB.

22. (new) The system of claim 14, wherein the agent MIB comprises a meta MIB comprising an object table and a trap table, wherein the meta MIB is configured to store an object identifier (OID); and wherein performing the walk operation comprises performing the walk operation on the meta MIB.